**Directions:**

Use Visual Studio to create a program solving the given problem statement. Show your completed code to a learning fellow for credit. If you complete it outside of class, submit the .cpp file into brightspace for credit.

**Problem Statement:**

Create a Tic Tac Toe program using I/O, branches, loops, vectors, and user defined functions.

**Grading Rubric:**

**20 pts** - Structure (Setting up the main, it runs, need at least one user defined function)

**15 pts** - Displaying the Board (Display elements on the board, doesn’t have to be correct)

**15 pts** - Accepting and Handling User Input (Doesn't have to include error handling)

**20 pts** - Checking for a Winner (Single function to determine if there’s a winner)

**30 pts** - Fully Playable Game

**+10 pts** - Add in a Computer Player

**110 pts**

**Template:**

#include<iostream>

#include<vector>

using namespace std;

int main()

{

int boardSize = 3\*3; //3x3

vector<char>> board(boardSize);

//Create the board

//Main game loop

//Display board

//Take Input

//Update board

//Check for winner

//Switch turns OR Announce winner

return 0;

}